

## **AGENDA ITEM SUMMARY**

### **AGENDA ITEM**

High School Graduates Performance Report  
Coordinating Board for Higher Education  
April 27, 2016

### **DESCRIPTION**

The Coordinating Board for Higher Education provides an annual report to the State Board of Education detailing the preparation, persistence, and completion rates of public high school graduates who enroll at Missouri's public two- and four-year postsecondary institutions. The intent of this board item is to provide a summary of the Missouri High School Graduates Performance Report for the public high school graduating classes of 2015 (Enrollment and Preparation), 2014 (Performance and Retention) and 2009 (Degree Completion).

### **Background**

The Missouri High School Graduates Performance Report tracks Missouri's public high school graduates entering the state's public two- and four-year degree-granting postsecondary institutions as first-time, full-time, undergraduate, degree-seeking students in the fall semester following their high school graduation.

The annual report, which was first issued in 1996, provides information to secondary and postsecondary stakeholders regarding student preparation, persistence and completion. Background on the history and structure of the High School Graduates Performance Report is available in Attachment A. Selected statewide summary data are described below. Detailed summary tables are included in Attachment B, and trend tables for individual high schools are available at <http://dhe.mo.gov/data/hsgradreport.php>. Current detail data will be added in the near future.

### **Enrollment and Preparation**

Total enrollment of same-year Missouri public high school graduates in Missouri public institutions decreased from 22,443 first-time, full-time, degree-seeking undergraduates in 2014 to 21,453 in 2015, a decrease of 4.4 percent (Table 1). 9,303 students (43.4 percent) attended two-year institutions, and 12,150 students (56.6 percent) attended four-year institutions. While enrollment of first-time, full-time, degree-seeking students decreased at public two-year institutions, enrollment increased at public four-year institutions by 2.7 percent from the previous year.

Policymakers acknowledge the link between college readiness and success at the postsecondary level. In the years since the High School Graduates' Performance Report was last presented, extensive policy work has been undertaken to strengthen students' preparation for entry into college-level work, and to lessen the need for remediation upon postsecondary enrollment.

Fall 2015 was the second cohort for which the CBHE Recommended College Preparatory High School Core Curriculum included a fourth year of mathematics. The MDHE has also continued to work with the institutions on multiple fronts to reduce enrollment in remediation for students at the higher end of the placement spectrum, and to encourage the wider implementation of co-requisite coursework. In addition, the MDHE and the institutions have agreed in recent years on a consistent definition for remedial coursework, which has impacted the reporting of student-level data used for the report. Data quality has definitely improved, resulting in greater accuracy in reporting of remedial enrollment.

Remedial Participation of Recent Missouri Public High School Graduates in Public Postsecondary Institutions					
	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
<b>Total</b>	35.5%	35.6%	35.6%	30.8%	28.2%
<b>Math</b>	29.9%	30.8%	30.1%	26.2%	23.8%
<b>English</b>	15.4%	14.3%	15.5%	12.3%	10.0%
<b>Reading</b>	10.1%	9.1%	9.7%	7.6%	6.1%

Of course, statewide averages can mask great variance across the state. Among high schools with at least 25 graduates enrolled in public colleges and universities in the fall of 2015, the percentage of students participating in any remedial coursework ranged from a low of approximately 4 percent to a high of over 65 percent.

*Other Trends in Enrollment and Preparation:*

- Fewer than half of all first-time, full-time high school Missouri public graduates entering an open admissions public institution enrolled in remedial coursework (45.2 percent), for the second consecutive year. The percentage of students enrolled in remedial coursework at moderately selective institutions rose slightly from 21.4 percent in fall 2014 to 22.5 percent in 2015, as did the percentage enrolled in remedial math, from 13.0 percent to 15.5 percent, though enrollment in remedial English and reading continue to decline.
- Overall remedial enrollments for women (29.9 percent) and men (26.1 percent) continue to decrease and are at six-year lows, as are 2015 enrollments in remedial math: 25.9 percent for women and 21.2 percent for men.
- Racial and ethnic disparities persist, although overall remedial enrollments (47.0 percent) and math (40.4 percent) are markedly lower among African-Americans compared to fall 2014.

## **Performance and Retention in College**

The High School Graduates Performance report also tracks several measures of student success and persistence in Missouri's public postsecondary sector. Detailed summary tables are included in Attachment B. Among the more significant findings for spring 2014 public high school graduates are:

- Fall-to-fall retention decreased slightly since 2013, returning to the 2012 level, from 77.1 percent to 76.6 percent. 2<sup>nd</sup> term (end of spring) retention dipped slightly, from 87.8 percent to 87.3 percent.
- On average, this cohort completed 30.9 credits by the end of the spring 2015 term with a 2.84 grade point average. Asian/Pacific Islanders completed 33.8 credits with a 3.00 GPA, and African-American students completed 19.8 credits with a 2.35 GPA; credits completed and GPA are up for both groups from spring 2013.
- 1<sup>st</sup> term (first fall) retention remains nearly identical across racial/ethnic groups, but begins to diverge at 2<sup>nd</sup> term, when Asian/Pacific Islanders retain at 92.2 percent and Caucasian students at 88.2 percent, but African-Americans retain at 84.5 percent (a slight increase from the 2013 cohort).
- Female students have a higher fall-to-fall retention rate (78.2 percent compared to 74.6 percent for men), despite historically enrolling in remediation at higher rates.

Retention rates varied by sector, which is indicative of differences in student demographics and preparation across sectors and institutional missions. Fall-to-fall retention in the two-year sector was 65.2 percent, compared to 86.7 percent at four-year institutions. Retention in the two-year sector is down slightly from 66.3 percent for the 2013 entering cohort.

## **Degree Completion**

The timely completion of a certificate or degree is an additional indication of how well prepared Missouri's high school graduates are for college-level work. Detailed tables in Attachment B show the six-year graduation rate of students beginning college in the fall of 2009. The findings include:

- Less than half (47.7 percent) of incoming public Missouri high school students who entered as a first-time, full-time degree-seeking student in fall 2009 had earned a two- or four-year degree from a public Missouri college or university by spring 2015, which is a decrease from the 2008 cohort (49.3 percent). This rate does not account for transfer or completion from an independent or out-of-state institution.
- 35.2 percent had earned a bachelor's degree, 15.8 percent earned an associate's degree, and 2.1 percent earned a graduate or professional degree within six years. Some students earned more than one degree, and are counted here more than once.

- As part of a continuing trend, women were more likely than men (50.4 percent compared to 44.6 percent) to have earned a degree within six years, as were students enrolled at highly selective (79.6 percent) and selective (67.3 percent) institutions.

### **Conclusion**

The Missouri High School Graduates Performance Report provides important data about trends in the preparation and performance of public high school graduates who attend public postsecondary institutions in Missouri. The entering high school class of 2015 enrolled in remedial coursework at a rate which continues to decline, but decreases in persistence and completion will bear continued monitoring. The MDHE also debuted a new fall survey in 2015 on enrollment in co-requisite and other alternate models of instructional support, and additional data will assist in evaluating the effectiveness of these approaches.

### **STATUTORY REFERENCES**

Section 173.750 RSMo, Annual reporting of performance of graduates, furnishing of report procedure data included

### **RECOMMENDED ACTION**

This is an information item only.

### **ATTACHMENT(S)**

Attachment A: History and Background

Attachment B: Detailed Tables

# High School Graduates Performance Report

## History and Background

The Missouri High School Graduates Performance Report tracks Missouri public high school graduates entering the state's public two- and four-year postsecondary institutions as first-time full-time, degree-seeking students in the fall semester following their high school graduation.

In accordance with Section 173.750, RSMo, the Missouri High School Graduates Performance Report should provide information to individual high schools and should be disaggregated by race and gender. No data identifying individual students should be included. The governing statute is available in its entirety at <http://www.moga.mo.gov/statutes/c100-199/1730000750.htm>. The report should include:

- Grade point average after the initial year in college
- Percent of students returning to college after the first and second semester
- Percent of students taking remedial courses in the basic academic subjects of English, mathematics, or reading
- Other data as determined by rule and regulation of the Coordinating Board for Higher Education

Data comprising the report comes from student enrollment data provided annually by Missouri's public colleges and universities. No data in the report comes from the state's independent higher education institutions. High school of record was verified by building-level data from the Missouri Department of Elementary and Secondary Education.

## High School Graduates Report Detailed Tables

### Enrollment and Preparation

Table 1: Recent Public Missouri High School Graduate Enrollment by Sector, Gender, and Race/Ethnicity, 2006 to 2015												10-Year % Change	1-Year % Change
		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
<b>Overall Enrollment</b>	#	20,195	20,839	21,598	22,228	23,948	23,742	21,018	22,034	22,443	21,453	6.2%	-4.4%
	%												
<b>Two-Year</b>	#	8,734	9,188	9,227	10,504	11,225	11,279	9,132	10,393	10,610	9,303	6.5%	-12.3%
	%	43.2%	44.1%	42.7%	47.3%	46.9%	47.5%	43.4%	47.2%	47.3%	43.4%		
<b>Four Year</b>	#	11,461	11,651	12,371	11,724	12,723	12,463	11,861	11,641	11,833	12,150	6.0%	2.7%
	%	56.8%	55.9%	57.3%	52.7%	53.1%	52.5%	56.4%	52.8%	52.7%	56.6%		
<b>Women</b>	#	11,093	11,421	11,755	12,013	13,067	12,997	11,596	12,175	12,342	11,816	6.5%	-4.3%
	%	54.9%	54.8%	54.4%	54.0%	54.6%	54.7%	55.2%	55.3%	55.0%	55.1%		
<b>Men</b>	#	9,101	9,411	9,838	10,211	10,863	10,733	9,397	9,844	10,092	9,628	5.8%	-4.6%
	%	45.1%	45.2%	45.6%	45.9%	45.4%	45.2%	44.7%	44.7%	45.0%	44.9%		
<b>African American</b>	#	1,793	1,895	2,055	2,269	2,433	2,553	1,525	2,209	2,065	2,010	12.1%	-2.7%
	%	8.9%	9.1%	9.5%	10.2%	10.2%	10.8%	7.3%	10.0%	9.2%	9.4%		
<b>Caucasian</b>	#	16,179	16,567	17,723	17,758	18,381	18,011	14,289	17,215	17,071	16,792	3.8%	-1.6%
	%	80.1%	79.5%	82.1%	79.9%	76.8%	75.9%	68.0%	78.1%	76.1%	78.3%		
<b>Hispanic</b>	#	381	359	481	486	374	343	275	470	620	846	122.1%	36.5%
	%	1.9%	1.7%	2.2%	2.2%	1.6%	1.4%	1.3%	2.1%	2.8%	3.9%		
<b>Asian / Pacific Islander</b>	#	347	345	372	347	408	395	333	486	537	497	43.2%	-7.5%
	%	1.7%	1.7%	1.7%	1.6%	1.7%	1.7%	1.6%	2.2%	2.4%	2.3%		
<b>Other</b>	#	1,495	1,673	967	1,368	2,352	2,440	4,596	1,654	2,150	1,308	-12.5%	-39.2%
	%	7.4%	8.0%	4.5%	6.2%	9.8%	10.3%	21.9%	7.5%	9.6%	6.1%		

Source: Enhanced Missouri Student Achievement Study (EMSAS)

**Table 2: Recent Missouri Public High School Graduate Enrollment in Remediation by Institutional Admissions Selectivity; 2011 to 2015**

	2011	2012	2013	2014	2015
<b>Selective</b>	<b>7.1%</b>	<b>13.1%</b>	<b>10.9%</b>	<b>10.5%</b>	<b>9.6%</b>
Math	6.6%	12.4%	10.1%	9.5%	8.7%
English	1.2%	1.5%	1.4%	1.6%	1.4%
Reading	-	-	-	-	-
<b>Mod Selective</b>	<b>25.6%</b>	<b>33.0%</b>	<b>31.7%</b>	<b>21.4%</b>	<b>22.5%</b>
Math	18.0%	26.9%	25.2%	13.0%	15.5%
English	10.5%	11.1%	12.5%	11.1%	10.3%
Reading	-	3.6%	3.8%	3.4%	0.5%
<b>Open</b>	<b>57.0%</b>	<b>54.7%</b>	<b>54.2%</b>	<b>47.8%</b>	<b>45.2%</b>
Math	48.9%	47.1%	45.7%	41.7%	38.9%
English	25.9%	25.3%	25.8%	20.0%	16.7%
Reading					

**Source: Enhanced Missouri Student Achievement Study (EMSAS)**

**Table 3: Recent Missouri Public High School Graduate Enrollment in Remediation by Gender; 2011 to 2015**

	2011	2012	2013	2014	2015
<b>Women</b>	<b>37.1%</b>	<b>37.5%</b>	<b>38.6%</b>	<b>32.4%</b>	<b>29.9%</b>
Math	32.5%	33.2%	33.7%	28.2%	25.9%
English	15.2%	14.1%	15.4%	12.2%	9.9%
Reading	10.9%	10.0%	10.8%	8.4%	6.4%
<b>Men</b>	<b>33.5%</b>	<b>33.3%</b>	<b>31.9%</b>	<b>28.7%</b>	<b>26.1%</b>
Math	26.8%	27.9%	25.7%	23.6%	21.2%
English	15.6%	14.5%	15.6%	12.4%	10.2%
Reading	9.2%	8.0%	8.4%	6.6%	5.8%

**Source: Enhanced Missouri Student Achievement Study (EMSAS)**

Table 4: Recent Missouri Public High School Graduate Enrollment in Remediation by Race; 2011 to 2015					
	2011	2012	2013	2014	2015
<b>African-American</b>	<b>60.5%</b>	<b>54.1%</b>	<b>65.5%</b>	<b>52.5%</b>	<b>47.0%</b>
Math	51.7%	46.9%	57.8%	44.0%	40.4%
English	35.0%	25.3%	37.6%	32.1%	23.8%
Reading	29.1%	12.4%	27.1%	23.9%	18.3%
<b>Caucasian</b>	<b>33.7%</b>	<b>30.3%</b>	<b>31.7%</b>	<b>27.0%</b>	<b>25.8%</b>
Math	28.6%	25.8%	26.8%	23.0%	21.7%
English	13.1%	10.3%	12.3%	10.0%	8.3%
Reading	8.0%	5.8%	7.4%	5.6%	4.8%
<b>Hispanic</b>	<b>41.1%</b>	<b>45.5%</b>	<b>43.8%</b>	<b>42.4%</b>	<b>32.4%</b>
Math	34.9%	33.9%	35.1%	31.6%	26.1%
English	21.7%	20.9%	19.4%	19.7%	13.2%
Reading	17.0%	17.3%	12.3%	13.4%	5.7%
<b>Asian / Pacific Islander</b>	<b>27.9%</b>	<b>18.5%</b>	<b>26.1%</b>	<b>25.0%</b>	<b>20.3%</b>
Math	20.2%	13.4%	19.3%	18.3%	16.5%
English	16.1%	9.0%	12.8%	12.5%	7.4%
Reading	11.0%	3.9%	8.6%	8.4%	5.6%
<b>Other / Unknown</b>	<b>24.1%</b>	<b>46.8%</b>	<b>37.7%</b>	<b>38.0%</b>	<b>30.5%</b>
Math	19.1%	41.9%	29.3%	34.6%	26.2%
English	11.1%	23.1%	18.0%	9.1%	9.7%
Reading					

Source: Enhanced Missouri Student Achievement Study (EMSAS)



## Performance and Retention in College

**Table 5: Recent Missouri Public High School Graduate Retention by Gender and Race/Ethnicity, Fall 2014- Fall 2015**

	Students	Completed Fall 2014	Avg. Fall 2014 GPA	Avg. Credits Completed (Fall 2014)	Completed Spring 2015	Avg. Spring 2015 GPA	Avg. Credits Completed (Spring 2015)	Enrolled Fall 2015
<b>Female</b>	<b>12,342</b>	<b>98.5%</b>	<b>2.78</b>	<b>19.4</b>	<b>88.3%</b>	<b>2.93</b>	<b>31.6</b>	<b>78.2%</b>
African American	1,245	97.6%	2.29	10.4	85.9%	2.46	20.5	68.1%
Caucasian	9,277	98.6%	2.88	20.9	89.1%	3.01	33.4	80.3%
Hispanic	344	98.8%	2.34	15.7	85.2%	2.77	26.9	73.0%
Asian / Pacific Islander	272	99.6%	3.00	21.9	94.9%	3.19	35.2	88.2%
Other/Unknown	1,204	97.8%	2.60	17.5	83.2%	2.79	29.0	71.6%
<b>Male</b>	<b>10,092</b>	<b>98.2%</b>	<b>2.54</b>	<b>17.9</b>	<b>86.1%</b>	<b>2.72</b>	<b>30.0</b>	<b>74.6%</b>
African American	820	97.7%	2.02	9.4	82.3%	2.19	18.7	62.1%
Caucasian	7,789	98.3%	2.62	19.2	87.0%	2.78	31.6	76.5%
Hispanic	276	98.6%	2.17	13.4	85.9%	2.56	24.6	70.3%
Asian / Pacific Islander	265	98.5%	2.71	20.1	89.4%	2.79	32.4	79.6%
Other/Unknown	942	97.5%	2.41	15.7	81.5%	2.61	27.2	69.3%
<b>Total</b>	<b>22,443</b>	<b>98.3%</b>	<b>2.67</b>	<b>18.8</b>	<b>87.3%</b>	<b>2.84</b>	<b>30.9</b>	<b>76.6%</b>
African American	2,065	97.6%	2.18	10.0	84.5%	2.35	19.8	65.7%
Caucasian	17,071	98.5%	2.76	20.1	88.2%	2.91	32.6	78.6%
Hispanic	620	98.7%	2.27	14.7	85.5%	2.68	25.9	71.8%
Asian / Pacific Islander	537	99.1%	2.86	21.0	92.2%	3.00	33.8	84.0%
Other/Unknown	2,150	97.6%	2.52	16.8	82.5%	2.71	28.3	70.6%

**Source: Enhanced Missouri Student Achievement Study (EMSAS)**

Table 6: Recent Missouri Public High School Graduate Retention by Sector and Race/Ethnicity, Fall 2014- Fall 2015

Sector	Students	Completed Fall 2014	Avg. Fall 2014 GPA	Avg. Credits Completed (Fall 2014)	Completed Spring 2015	Avg. Spring 2015 GPA	Avg. Credits Completed (Spring 2015)	Enrolled Fall 2015
<b>Public 2Y</b>	<b>10,611</b>	<b>97.6%</b>	<b>2.33</b>	<b>14.5</b>	<b>80.5%</b>	<b>2.64</b>	<b>24.1</b>	<b>65.2%</b>
African American	900	95.8%	1.82	5.2	76.7%	2.21	11.9	49.8%
Caucasian	7,747	97.8%	2.41	15.7	81.3%	2.69	25.5	67.3%
Hispanic	366	98.6%	1.86	11.5	79.5%	2.56	20.4	62.3%
Asian / Pacific Islander	196	98.0%	2.28	12.2	85.7%	2.66	20.6	70.9%
Other/Unknown	1,402	97.4%	2.36	14.9	78.2%	2.62	24.9	64.0%
<b>Public 4Y</b>	<b>11,832</b>	<b>98.9%</b>	<b>2.98</b>	<b>22.5</b>	<b>93.4%</b>	<b>2.99</b>	<b>36.2</b>	<b>86.7%</b>
African American	1,165	99.1%	2.45	13.6	90.6%	2.45	25.0	78.0%
Caucasian	9,324	99.0%	3.06	23.8	93.8%	3.06	37.7	87.9%
Hispanic	254	98.8%	2.85	19.3	94.1%	2.82	32.5	85.4%
Asian / Pacific Islander	341	99.7%	3.19	26.0	95.9%	3.17	40.6	91.5%
Other/Unknown	748	98.1%	2.82	20.2	90.5%	2.85	33.7	83.0%

Source: Enhanced Missouri Student Achievement Study (EMSAS)

## Degree Completion

**Table 7: Recent Missouri Public High School Graduate Six-Year Completion Rate by Gender and Race/Ethnicity, Fall 2009 through Spring 2015**

	Students	% Completed Associate's	% Completed at least Bachelors'	% Completed Graduate / Professional	Total Completions
<b>Female</b>	<b>11,905</b>	<b>16.6%</b>	<b>37.3%</b>	<b>2.8%</b>	<b>50.4%</b>
African American	1362	6.5%	20.6%	0.4%	26.1%
Caucasian	9,420	18.3%	39.9%	3.1%	54.2%
Hispanic	290	15.2%	31.4%	1.0%	43.5%
Asian / Pacific Islander	165	9.7%	53.3%	6.7%	61.2%
Other/Unknown	668	16.2%	33.4%	2.0%	46.4%
<b>Male</b>	<b>10,186</b>	<b>14.8%</b>	<b>32.7%</b>	<b>1.4%</b>	<b>44.6%</b>
African American	854	3.5%	17.1%	0.4%	20.1%
Caucasian	8,282	16.4%	34.6%	1.5%	47.7%
Hispanic	232	10.3%	26.7%	0.9%	35.3%
Asian / Pacific Islander	186	11.3%	38.7%	2.7%	46.2%
Other/Unknown	632	12.0%	30.1%	1.1%	39.9%
<b>Total</b>	<b>22,095</b>	<b>15.8%</b>	<b>35.2%</b>	<b>2.1%</b>	<b>47.7%</b>
African American	2217	5.4%	19.3%	0.4%	23.8%
Caucasian	17,703	17.4%	37.4%	2.4%	51.2%
Hispanic	522	13.0%	29.3%	1.0%	39.9%
Asian / Pacific Islander	351	10.5%	45.6%	4.6%	53.3%
Other/Unknown	1302	14.1%	31.7%	1.5%	43.2%

**Source: Enhanced Missouri Student Achievement Study (EMSAS)**

**Table 8: Recent Missouri Public High School Graduate Six-Year Completion Rate by Institutional Admissions Selectivity, Fall 2009 through Spring 2015**

	Students	Completed Associate's Degree	% Completed at least Bachelor's	% Completed Graduate / Professional	Total Completions
<b>Total</b>	<b>22,095</b>	<b>15.8%</b>	<b>35.2%</b>	<b>2.1%</b>	<b>47.7%</b>
Highly Selective	812	2.6%	77.2%	9.0%	79.6%
Selective	6,443	3.3%	64.0%	4.8%	67.3%
Moderately Selective	3289	5.2%	51.6%	2.0%	54.8%
Open	11551	26.7%	11.5%	0.2%	32.5%

Source: Enhanced Missouri Student Achievement Study (EMSAS)





